

The Floor of the Ocean.

The ocean has been sounded in nearly all directions with modern appliances, and these soundings show that the floor of the ocean consists of vast undulating plains, lying at an average depth of about two and a half miles beneath the surface of the waves. In some places huge ridges and cones rise from these submerged plains to within a few hundred fathoms of the sea surface, or they may rise above the surface as volcanic islands and coral atolls. The greatest depth hitherto recorded is in the Challenger (or Nero) Deep in the North Pacific—5,269 fathoms. If Mount Everest were placed in this deep, 2,600 feet of water would roll over the peak of this, the highest mountain in the world. The greatest depth in the Atlantic is in the Nares Deep, between the West Indies and Bermuda—4,662 fathoms. The greatest depth in the Indian Ocean is 3,828 fathoms, in the Wharton Deep, between Christmas Island and the coast of Java. We now know fifty-six of these deeps where the depth exceeds three geographical miles, ten areas where the depth exceeds four miles, and four places where it exceeds five miles.

The sea as all the world knows, is salt. It is saltiest where strong, dry winds blow across the surface, as, for instance, in the trade-wind regions and in the Mediterranean and the Red Sea. It is less salt toward the poles and in the deeper layers of the ocean. It has long been known that the very salt water of the Mediterranean flows as an undercurrent outward through the Strait of Gibraltar, and thus affects the salinity of the deeper waters of the Atlantic over a wide area. Although the amount of salt in sea water varies, the composition of sea-salts remains very constant; slight differences have, however, been noticed along the continental coasts, in the polar regions, and in the water in direct contact with deep-sea deposits.

The temperature of ocean water varies at the surface from 28° Fahr. at the poles to over 80° Fahr. in the tropics. The cold water toward the poles has an annual variation of less than ten degrees Fahr. at any one spot, and the warm water of the tropics also has an annual variation of less than ten degrees Fahr. in a band that nearly encircles the earth; this is the region of coral reefs and atolls. Between these regions of small annual variation there are two bands surrounding the earth where the annual variation is greater, and may exceed in certain regions

40° Fahr. at any one spot.—*Sir John Murray, in Harper's Magazine for March.*

The first snow came. How beautiful it was, falling so silently all day long, all night long, on the mountains, on the meadows, on the roofs of the living, on the graves of the dead! All white, save the river that marked its course by a winding black line across the landscape, and the leafless trees that against the laden sky now revealed more fully the wonderful beauty and intricacy of their branches.

What silence, too, came with the snow, and what seclusion! Every sound was muffled, every noise changed to something soft and musical. No more trampling hoofs, no more rattling wheels. Only the chiming sleigh bells, beating as swift and merrily as the hearts of children.—*Longfellow.*

These are the things I prize
And hold of dearest worth;
Light of the sapphire skies,
Peace of the silent hills,
Shelter of woods and comfort of the grass,
Music of birds, murmur of little rills,
Shadows of clouds that swiftly pass,
And, after showers,
The smell of flowers
And of the good brown earth.—*Henry Van Dyke.*

It should not be necessary for country children to attend the city schools. Schools should be brought to the pupil. Country men and women should take greater pride in their schools than in their live stock and their crops, for the schools are raising the most valuable crop of all. No farm crop compares with the crop of children. In these boys and girls is wrapped up the future of the agricultural interests of the nation. Upon the training they receive in their formative years depends the service they shall render the cause of agriculture when they assume charge of farm affairs.—*Farmer's Voice.*

The 1911 edition of 5,000 Facts About Canada, edited by Frank Yeigh, of Toronto, the well known lecturer and writer, and author of the new book, "Through the Heart of Canada," has been issued and is filled with fresh data of an interesting character. It is a marvel of condensation, presenting in small space striking figures relating to every phase and department of Canada's resources, trade and national life. Its popularity and wide sale can easily be understood; in fact, it is, as has been said, "worth its weight in Cobalt silver or Yukon gold." The booklet may be had from the leading newsdealers, or for 25 cents from the Canadian Facts Publishing Co., 667 Spadina Avenue, Toronto.